

## GLOBAL MANAGEMENT OF LOCAL LINK POWER CONSUMPTION

### ABSTRACT

Methods, and arrangements for power reduction in links, such as transmitters and  
5 receivers, based upon global decisions such as the data transmission frequencies,  
communications media, and traffic types associated with links, are disclosed. In particular,  
embodiments take advantage of high-level decisions by reconfiguring internal circuits of  
transmitters and receivers of links to reduce power consumption. At the global level, a decision  
determines the links that are active, the data frequency at which the links operate, and the media  
10 through which the links transmit the data. At the local level, the links receive the decisions and  
reconfigure circuitry automatically to minimize power based upon the decisions. In some  
embodiments, the links may receive the decisions in the form of power modes. In further  
embodiments, the links may receive settings such as on/off settings, data frequency settings, and  
traffic/media settings, the combination of which indicates power modes.